

**CLAIMS**

1. An engine control system in a vehicle comprising:  
an internal combustion engine;  
an electronic throttle controlling air flow to said internal  
combustion engine;
- 5           a controller controlling the position of said electronic throttle;  
an accelerator pedal having an accelerator pedal sensor which  
generates a signal to said controller; and  
wherein said controller computes a rate of change for said  
accelerator pedal and actuates said electronic throttle to a desired position
- 10          based upon said rate of change for said accelerator pedal.

  

2. The engine control system of Claim 1 wherein said rate of  
change for said accelerator pedal comprises a rate of position change.
3. The engine control system of Claim 1 wherein rate of change  
for said accelerator pedal comprises a rate of force change.
4. The engine control system of Claim 1 wherein said internal  
combustion engine is a gasoline engine.
5. The engine control system of Claim 1 wherein said accelerator  
pedal sensor is a linear encoder.
6. The engine control system of Claim 1 wherein said accelerator  
pedal sensor is a potentiometer.
7. The engine control system of Claim 1 wherein said accelerator  
pedal sensor is a strain gauge.

8. A method of controlling an electronic throttle in an internal combustion engine comprising:

measuring a variable indicative of torque for the variable displacement internal combustion engine; and

5 adaptively modifying the torque to vary the displacement of the variable displacement internal combustion engine.

9. The method of Claim 8 wherein the step of adaptively modifying the torque threshold to vary the displacement of the variable displacement internal combustion engine is based on the time the variable displacement engine operates in a partially displaced operating mode.

10. An engine control system in a vehicle comprising:

an internal combustion engine;

a throttle controlling air flow to said internal combustion engine;

a controller controlling the position of said electronic throttle;

5 an accelerator pedal having an accelerator pedal sensor which generates a signal to said controller; and

wherein said controller predicts a rate of change for said accelerator pedal and actuates said electronic throttle to a desired position based upon said predicted rate of change for said accelerator pedal.

11. The engine control system of Claim 10 wherein said rate of change for said accelerator pedal comprises a rate of position change.

12. The engine control system of Claim 10 wherein said rate of change for said accelerator pedal comprises a rate of force change.

13. The engine control system of Claim 10 wherein said internal combustion engine is a gasoline engine.

14. The engine control system of Claim 10 wherein said accelerator pedal sensor is a linear encoder.

15. The engine control system of Claim 10 wherein said accelerator pedal sensor is a potentiometer.